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CLAIMS

- 1. Method for transmitting data from several first stations (la-ln) to a second station (2), the first stations each comprising at least a first transmitter (11), a first receiver (12) and a first clock (16), and the second station (2) comprising at least a second transmitter (21), a second receiver (22) and a second clock (26), the method comprising:
- transmitting, in a synchronisation time slot (5) of a time
 10 window (4), a synchronisation message (SYN) from the second
 station (2) to the first stations (1),
 - transmitting, in a selection time slot (6) of the time window (4), selection messages (SEL) from the second station (2) to selected first stations (1),
- 15 transmitting, in response time slots (8) of the time window (4), data from selected first stations (1) to the second station (2),

characterised by transmitting, in a single selection time slot (6), the selection messages (SEL) and by deactivating, by each first station (1), its receiver (12) if no respective selection message (SEL) has been transmitted.

- 2. Method according to claim 1, wherein the deactivation takes place at the end of the selection time slot (6).
- 3. Method according to claim 1, wherein the selection messages (SEL) are transmitted in a predetermined sequence and the deactivation takes place based on the sequence.
- 30 4. Method according to claim 3, wherein several sequences are applied and a sequence indication of the sequence to be applied in a specific time window (4) is transmitted by the second station (2) in the synchronisation time slot (5).

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Method according to any of the preceding claims, wherein the selection messages (SEL) each contain a time indication (TR) of the response time slots (8).

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- 6. Method according to any of the claims 1-3, wherein the selection messages (SEL) each contain a time indication (TC) of command time slots (7) following the selection time slot (6) for transmitting command messages (COM) from the second station (2) to the selected first station (1).
 - 7. Method according to claim 6, wherein a command message (COM) contains a time indication (TR) of a response time slot (8).
- any of cof claims 1-4

 8. Method according to any of the preceding claims, wherein the transmitter (11) of each first station (1) is activated only during the respective response time slot (8).
- 9. Method according to any of the preceding claims, wherein the duration of the current time window (4) is transmitted to the first stations (1) by the second station (2) in the synchronisation time slot (5).
 - 10. System for transmitting data comprising:
 - 20 several first stations (1), each having a first transmitter (11), a first receiver (12), a first control unit (13) and a first clock (16),
 - a second station (2) having a second transmitter (21), a second receiver (22), a second control unit (23) and a second clock (26),

the first stations (1) being arranged for synchronising their clocks (16) based on a synchronisation message (SYN) transmitted by the second station (2), and transmitting data as a function of selection messages (SEL) transmitted by the second station (2),

characterised in that
the second station (2) is arranged for consecutively transmitting the
selection messages (SEL), and that the first stations (1) are
arranged for deactivating their receivers (12) in response to the
absence of a corresponding selection message (SEL).

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